

~~18 expression or activity [of a *daf-18* gene], comprising:~~

~~(a) providing a [cell] nematode, isolated nematode cell, or isolated mammalian cell expressing a nematode *daf-18* gene; and~~

~~(b) contacting said [cell] nematode, isolated nematode cell, or isolated mammalian cell with a candidate compound, an alteration in *daf-18* expression or activity following contact of said nematode, isolated nematode cell, or isolated mammalian cell with said candidate compound identifying a modulatory compound.~~

C1
CONF. Sub 7
2. (Amended) A method for identifying a compound that modulates [the] PTEN expression or activity [of a *daf-18* gene], comprising:

~~(a) providing a [cell] nematode or isolated nematode cell comprising a mutation in [a] its endogenous *daf-18* gene;~~

~~(b) expressing in said [cell] nematode or isolated nematode cell a mammalian [DAF-18 homologue] PTEN gene; and~~

~~(c) contacting said [cell] nematode or isolated nematode cell with a candidate compound, an alteration in [said mammalian DAF-18] PTEN expression or activity following contact with said candidate compound identifying a modulatory compound.~~

3. (Amended) The method of claim 1 or 2, wherein said compound increases *daf-18* or PTEN expression or activity and is therefore [capable of] a candidate compound for

increasing longevity of a cell or organism.

C1
CONT.
4. (Amended) The method of claim 1 or 2, wherein said compound decreases *daf-18* or PTEN expression or activity and is [capable of] therefore a candidate compound for treating an impaired glucose tolerance condition or obesity.

C2
8. (Twice Amended) The method of claim [3] 2, wherein said [DAF-18 homologue] PTEN is [a] human [homologue] PTEN.

C3
10. (Amended) A method for identifying a compound that is [capable of] a candidate compound for ameliorating or delaying an impaired glucose tolerance condition or obesity, comprising contacting a biological sample with a candidate compound and assaying said sample for DAF-18-mediated lipid phosphatase activity, a decrease in said activity indicating a candidate compound [capable of] for ameliorating or delaying an impaired glucose tolerance condition or obesity.

11. (Amended) A method for identifying a compound that is [capable of] a candidate compound increasing longevity of a cell or organism, comprising contacting a biological sample with a candidate compound and assaying said sample for DAF-18-mediated lipid phosphatase activity, an increase in said activity indicating a candidate

compound [capable of] for increasing longevity of a cell or organism.

12. (Amended) A method for identifying a compound that is [capable of] a candidate compound for ameliorating or delaying an impaired glucose tolerance condition or obesity, comprising contacting a biological sample with a candidate compound and assaying said sample for PTEN-mediated lipid phosphatase activity, a decrease in said activity indicating a candidate compound [capable of] for ameliorating or delaying an impaired glucose tolerance condition or obesity.

C3
cont.
13. (Amended) A method for identifying a compound that is [capable of] a candidate compound for increasing longevity of a cell or organism, comprising contacting a biological sample with a candidate compound and assaying said sample for PTEN-mediated lipid phosphatase activity, an increase in said activity indicating a candidate compound [capable of] for increasing longevity of a cell or organism.

14. (Twice Amended) The method of claim 10 or 12, wherein said method further comprises assaying said compound in a [cell] nematode or isolated nematode cell which comprises a mutation in [a] its endogenous daf-18 gene and which expresses a mammalian [DAF-18 homologue] PTEN gene, a decrease in [DAF-18] PTEN activity indicating a candidate compound [capable of] for treating an impaired glucose tolerance

condition or obesity.

C3
cont.
15. (Twice Amended) The method of claim 11 or 13, wherein said method further comprises assaying said compound in a [cell] nematode or isolated nematode cell which comprises a mutation in [a] its endogenous daf-18 gene and which expresses a mammalian [DAF-18 homologue] PTEN gene, an increase in [DAF-18] PTEN activity indicating a candidate compound [capable of] for increasing longevity of a cell or organism.

16. (Twice Amended) The method of claim 14, wherein said mammalian [DAF-18 homologue] PTEN is human PTEN.

17. (Twice Amended) The method of claim 15, wherein said mammalian [DAF-18 homologue] PTEN is human PTEN.

C4
25. (Twice Amended) The transgenic nematode of claim 23, wherein said nematode carries a mutation in [a] its endogenous daf-18 gene.

Add the following new claims 27 and 28.

C5
--27. The transgenic nematode of claim 23, wherein said mammalian PTEN is